



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
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April 30, 2012

Susan Jeheber-Matthews
Forest Supervisor
Apalachicola National Forest
325 John Knox Road,
Tallahassee, Florida 32303

**RE: Final Environmental Impact Statement, City of Tallahassee Southwestern
Transmission Line Project
CEQ Number: 20120084**

Dear Ms. Jeheber-Matthews:

Pursuant to Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the U.S. Environmental Protection Agency (EPA) has reviewed the subject Final Environmental Impact Statement, City of Tallahassee Southwestern Transmission Line Project. The USDA Forest Service is the lead federal agency for the proposed action.

This Final Environmental Impact Statement (FEIS) is being prepared by the United States Department of Agriculture, Forest Service (USFS) to evaluate the potential environmental impacts associated with the Southwestern Transmission Line project proposed by the City of Tallahassee (The City). The City proposes to traverse a previously disturbed portion of the Apalachicola National Forest (ANF), which would require the ANF to issue the City a Special Use Permit (SUP). The project would provide enhanced system benefits that would meet the North American Electric Reliability Corporation's mandated requirements and would improve overall system performance and reliability of service to City utility customers.

Specifically, the City proposes to construct, operate, and maintain a new overhead 230-kilovolt (kV) electric transmission line in southwestern Leon County, Florida. The proposed line would connect the existing Hopkins-Crawfordville 230kV transmission line with the existing Substation BP-5, southeast of the intersection of Capital Circle SE and Woodville Highway. This action would include the development of a new tap station.

PLAN ALTERNATIVES

The **No Action Alternative**, **Alternative 1 (the Preferred Alternative)**, and **Alternative 3** (the off-Forest Service property alternative route) are carried forward through the EIS.

The No Action Alternative considers the environmental impacts if the proposed project or its alternatives were not built. Evaluation of the No Action Alternative is a requirement of NEPA and its associated implementing regulations (40 CFR 1502.14[d]) to allow federal decision-makers (in this case, the USFS) to compare the impacts of the proposed project and its alternatives with the impacts of not approving the project. The Forest Service only has authority to authorize an SUP for the construction and maintenance of the proposed transmission line on National Forest System Lands. Not authorizing the SUP would not prohibit the City from constructing the transmission line off of National Forest System Lands. Consideration of the No Action Alternative in this EIS compares the impacts should the City of Tallahassee decide not to construct a transmission line off of National Forest System Lands.

Under the No Action Alternative, the electrical transmission system proposed to connect Line 31 to the existing Substation BP-5 would not be constructed. Proposed improvements to the City's 31 transmission system are necessary in order for the City to continue its operation within applicable limits consistent with the requirements of NERC Reliability Standards. Without the proposed system improvements, City planning assessments indicate that the existing lines forming the southern delivery path could exceed their applicable limits (thermal, voltage, IROLs, and/or SOLs) as a result of contingencies impacting the northern delivery path. Further, a USFS decision approving the No Action Alternative would result in the City being in non-compliance with NERC Reliability Standards, resulting in potential fines and penalties.

Alternative 1 (the Preferred Alternative) proposed transmission line would be approximately 8.75 miles long and would require a 60-foot-wide permanent ROW. The entire 8.75-mile ROW would be co-located with existing utilities, allowing for overlap in the ROW. Seven of the 8.75 miles would be located within the 60-foot-wide temporary work space which was previously cleared of forested vegetation during improvement work on the existing 80-foot-wide FGT ROW in 2010. Of the 7 miles of the Alternative 1 ROW co-located with the FGT ROW, 6.48 miles is located within the ANF.

The Alternative 1 route would begin at a tap point along the existing Line 31 utilizing a new tap station near Bice Road (Forest Road 317), in the vicinity of the intersection of Springhill Road (County Road 2203) and Bice Road (Figure 2-4). From the proposed tap station, the Alternative 1 route would continue east, primarily co-located along the south side of the existing FGT natural gas pipeline corridor through the ANF for approximately 6.48 miles.

Approximately 3 miles east of the proposed tap station, the Alternative 1 route would cross an existing City 115kV transmission line. The proposed line would proceed east crossing Crawfordville Highway (US 319) and Wakulla Springs Road (State Road [SR] 61). Almost immediately to the east of Wakulla Springs Road, the Alternative 1 route would cross Munson Slough.

Continuing along the co-located corridor approximately 5 miles east of the proposed tap station, the Alternative 1 route would cross another existing City 115kV transmission line and would continue east, crossing the Tallahassee-St. Marks Historic Railroad State Trail and Woodville Highway (SR 363). Approximately 0.5 mile east of Woodville Highway, after

crossing a third existing City 115kV transmission line, the route would turn northwest and would continue north co-located along the east side of this existing transmission corridor for approximately 1.75 miles before terminating at the existing Substation BP-5 south of Capital Circle SE.

Approximately 7 miles of the east-west portion of the Alternative 1 route would be co-located along the existing FGT pipeline corridor; 6.48 miles of which would be within the ANF. As documented in the FGT FEIS (FERC 2009), FGT added a new pipeline to this corridor, resulting in the co-location of three pipelines. Due to the proposed co-location with an existing linear corridor, this alternative would be in compliance with the LRMP and would not require an amendment to the plan. Standard LA-9 governs the granting of SUPs and states that the USFS shall “designate existing transportation and utility routes, and rights-of-way capable of accommodating these facilities [facilities for which SUPs are sought] as right-of-way corridors. Subsequent right-of-way grants would, to the extent practicable, be confined to designated corridors.”

Under Alternative 1, no new access roads would be necessary for construction and maintenance of the Proposed Action. The Alternative 1 route would utilize access roads previously utilized by FGT for their pipeline construction efforts and existing City access roads on the existing City 115kV transmission line easement. An extensive network of existing Forest Roads and existing publicly maintained roadways also would be utilized by construction and maintenance equipment. Two staging or lay down areas would be required for Alternative 1. These staging areas would be located within the existing FGT temporary construction ROW. One staging area would be located west of Munson Slough near the proposed Alternative 1 tap station. The second lay down area would be located east of Munson Slough, outside the ANF. Therefore, no additional workspace outside the ROW footprint or existing roads would be needed for the transmission line.

Under **Alternative 1, the proposed tap station** would be located within the ANF. The design for the tap station would have two breakers west of Bice Road and one breaker east of Bice Road. The proposed design would require an additional 100-foot-wide ROW (9,000 square feet) to connect the tap station to power line structures. The proposed tap station equipment would occupy approximately 0.33 acre and would require approximately 3 acres for construction. Construction of the proposed tap station would begin with clearing and grading of approximately 3 acres. A fence would be installed around the perimeter of the tap station to provide for public safety and security. Access to the tap station for construction activities would be via Bice Road. Construction of Alternative 1 and the tap station would occur over an approximately six-month timeframe and would require a temporary workforce of approximately 30 personnel.

Alternative 3 is being analyzed in compliance with the USFS’s 1999 LRMP Standards LA-8 and LA-9 which govern the issuance of SUPs. Standard LA-8 states that proposals for an SUP should “not be undertaken on national forest land if they can be reasonably accommodated on private land.” Further, Standard LA-9 states that “alternative locations off national forests [which can accommodate the proposal will be reviewed in detail.” Selection of this alternative is not within the authority of the USFS. If issuance of an SUP is denied by the USFS, the City may

pursue this or other alternatives outside of the ANF following applicable local and state procedures without involvement from the USFS. However, it will be analyzed herein to comply with the LRMP Standards described above.

EPA COMMENTS

General Comments

Types of Impacts Associated with Transmission Lines

Aesthetics

Potential Aesthetic Impacts

The overall aesthetic effect of a transmission line is likely to be negative to most people, especially where proposed lines would cross natural landscapes and private properties. The tall steel or wide H-frame structures may seem out of proportion and not compatible with agricultural landscapes or residential neighborhoods. Landowners who have chosen to bury their electric distribution lines on their property may find transmission lines bordering their property particularly disruptive to scenic views.

Electric and Magnetic Fields (EMF)

Potential Impacts of EMF

Health concerns over exposure to EMF are often raised when a new transmission line is proposed. Exposure to electric and magnetic fields caused by transmission lines has been studied since the late 1970s. These fields occur whenever electricity is used. A magnetic field is created when electric current flows through any device including the electric wiring in a home. Every day we are exposed to many sources of EMF from vacuum cleaners, microwaves, computers, and fluorescent lights. The research to date has uncovered only weak and inconsistent associations between exposures and human health. To date the research has not been able to establish a cause and effect relationship between exposure to magnetic fields and human disease, nor a plausible biological mechanism by which exposure to EMF could cause disease. The magnetic fields produced by electricity do not have the energy necessary to break chemical bonds and cause DNA mutations.

Specific Comments

Endangered/Threatened and Protected Species

Potential Impacts to Protected Species

Endangered species are species whose continued existence is in jeopardy. Threatened species are likely to become endangered. Species of special concern have some problems related to their abundance or distribution, although more study is required. Construction and maintenance of transmission lines might destroy individual plants and animals or might alter their habitat so that it becomes unsuitable for them. For example, trees used by rare birds for nesting might be cut down or soil erosion may degrade rivers and wetlands that provide required

habitat.

Mitigation of Impacts to Protected Species

EPA concurs with the FEIS's 46 mitigations activities specific to a wide variety of wildlife species.

Invasive Species

Potential Impacts by Invasive Species

Non-native plants, animals, and microorganisms found outside of their natural range can become invasive. The majority of non-native species are harmless because they do not reproduce or spread abundantly in their new surroundings. Some non-native species have been introduced intentionally, however, a small percentage of non-native species are able to become quickly established, are highly tolerant of a wide range of conditions, and are easily dispersed. The diseases, predators, and parasites that kept their populations in check in their native range may not be present in their new locations. Over time, non-native, invasive species can overwhelm and eliminate native species, reducing biodiversity and negatively affecting both ecological communities and wildlife habitats. Human actions are the primary means of invasive species introductions. Transmission line construction causes disturbance of ROW soils and vegetation through the movement of people and vehicles along the ROW, access roads, and laydown areas. These activities can contribute to the spread of invasive species. Parts of plants, seeds, and root stocks can contaminate construction equipment and essentially "seed" invasive species wherever the vehicle travels. Invasive species' infestations can also occur during periodic transmission ROW maintenance activities especially if these activities include mowing and clearing of vegetation. Once introduced, invasive species will likely spread and impact adjacent properties with the appropriate habitat.

Best Management Practices

To establish preventive measures to help minimize their spread Best Management Practices (BMP) will assist utilities in complying with "reasonable precaution" requirements. BMPs identifies many methods that can be used to limit the introduction and spread of invasives species during and post-construction. These measures include marking and avoidance of invasives, timing construction activities during periods that would minimize their spread, proper cleaning of equipment, and proper disposal of woody material removed from the ROW. Because construction measures may not be completely effective in controlling the introduction and spread of invasives, post-construction activities are required. Sensitive areas such as wetlands and high quality forests should be surveyed for invasive species following restoration of the construction site. If new infestations are discovered, then measures should be taken to control the infestation. Each exotic or invasive species requires its own protocol for control or elimination. Techniques to control exotic/invasive species include the use of pesticides, biological agents, hand pulling, controlled burning, and cutting or mowing.

Water Resources

Potential Impacts to Surface Waters

Surface waters in the form of creeks, streams, rivers, and lakes are abundant throughout Florida. Many of these waters have been designated as special resources that have state, regional, or national significance. Construction and operation of a transmission line across these resources may have both short-term and long-term effects. Water quality can be impacted not only by work within a lake or river but also by nearby clearing and construction activities. The removal of adjacent vegetation can negatively affect aquatic habitats. It can also increase erosion of adjacent soils causing sediment to be deposited into the waterbody, especially during rain events. Construction often requires the building of temporary bridges across small channels, which if improperly installed may damage banks and cause erosion. Overhead transmission lines across major rivers, streams, or lakes may have a visual impact on the users and pose a potential collision hazard for waterfowl and other large birds, especially when located in a migratory corridor.

Surface waters in the vicinity of Alternatives 1 and 3 are relatively limited, consisting primarily of Lake Munson and Munson Slough located southwest of Tallahassee. Lake Munson is a cypress-lined impoundment of Munson Slough covering 255 acres. Lake Munson drains south through Munson Slough for several miles to Ames Sink. Munson Slough (upstream of Lake Munson) is impaired for dissolved oxygen and fecal coliform. Downstream of Lake Munson, Munson Slough is impaired for dissolved oxygen and un-ionized ammonia. Alternative 1 ROW would avoid all direct impacts to surface water bodies (including Munson Slough and the unnamed tributary to Munson Slough), as in-stream work would not be necessary and these crossings would be spanned.

Wetlands

Potential Impacts to Wetlands

Wetlands occur in many different forms and serve vital functions including storing runoff, regenerating groundwater, filtering sediments and pollutants, and providing habitat for aquatic species and wildlife. The construction and maintenance of transmission lines can damage wetlands in the following ways:

- * Heavy machinery can crush wetland vegetation and wetland soils.
- * Wetland soils, especially very peaty soils can be easily compacted, increasing runoff, blocking flows, and greatly reducing the wetland's water holding capacity.
- * The construction of access roads can change the quantity or direction of water flow, causing permanent damage to wetland soils and vegetation.
- * Construction and maintenance equipment that crosses wetlands can stir up sediments, endangering fish and other aquatic life.
- * Clearing forested wetlands can expose the wetland to invasive and shrubby plants, thus removing habitat for species in the forest interior.

* Vehicles and construction equipment can introduce exotic plant species. With few natural controls, these species may out-compete high-quality native vegetation, destroying valuable wildlife habitat.

Mitigation of Impacts to Water Resources

Section 4 of the FEIS includes 128 specific mitigation measures for all water resources. This section included all of the items listed in the DEIS letter from EPA under Impacts to Wetlands except using wide-track vehicles and helicopters which weren't included because the project will not go through any wetlands.

Forests

Potential Impacts to Forests

Forests provide recreational opportunities, wildlife and plant habitats, and timber. Building a transmission line through woodlands requires that all trees and brush be cleared from the ROW. One mile of 100-foot ROW through a forest results in the loss of approximately 12 acres of trees. Transmission construction impacts can include forest fragmentation and the loss and degradation of wooded habitat, aesthetic enjoyment of the resource, and/or the loss of income. Different machines and techniques are used to remove trees from the transmission ROW depending on whether woodlands consist of mature trees, have large quantities of understory trees, or are in sensitive environments such as a wooded wetland. These can range from large whole tree processors which can cause rutting and compaction of the forest floor to hand clearing with chainsaws in more sensitive environments. Smaller diameter limbs and branches are often chipped or burned. According to the landowner's wishes, wood chips may be spread on the ROW, piled to allow transport by the landowner to specific locations, or chipped directly into a truck and hauled off the ROW.

However, the entire 8.75-mile ROW would be co-located with existing utilities therefore impacts to forestry should be minimal.

Environmental Justice (EJ)

All potentially affected landowners within 1/4 mile of the proposed routes were individually contacted by mail and an open house meeting was held. Due to the limited scope of the project and the results of the scoping no EJ issues were identified.

Conclusion

The review has not identified any potential environmental impacts requiring substantive changes to the preferred alternative. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposed action. Based on the FEIS, Alternative 1 (the Preferred Alternative), with consideration of additional Best Practices, would appear to be the best approach. EPA's issues have been adequately addressed and we have no additional concerns.

We appreciate the opportunity to review the proposed action. Please contact Ken Clark at (404) 562-8282, clark.ken@epa.gov if you have any questions or want to discuss our comments.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mueller", with a stylized flourish at the end.

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management